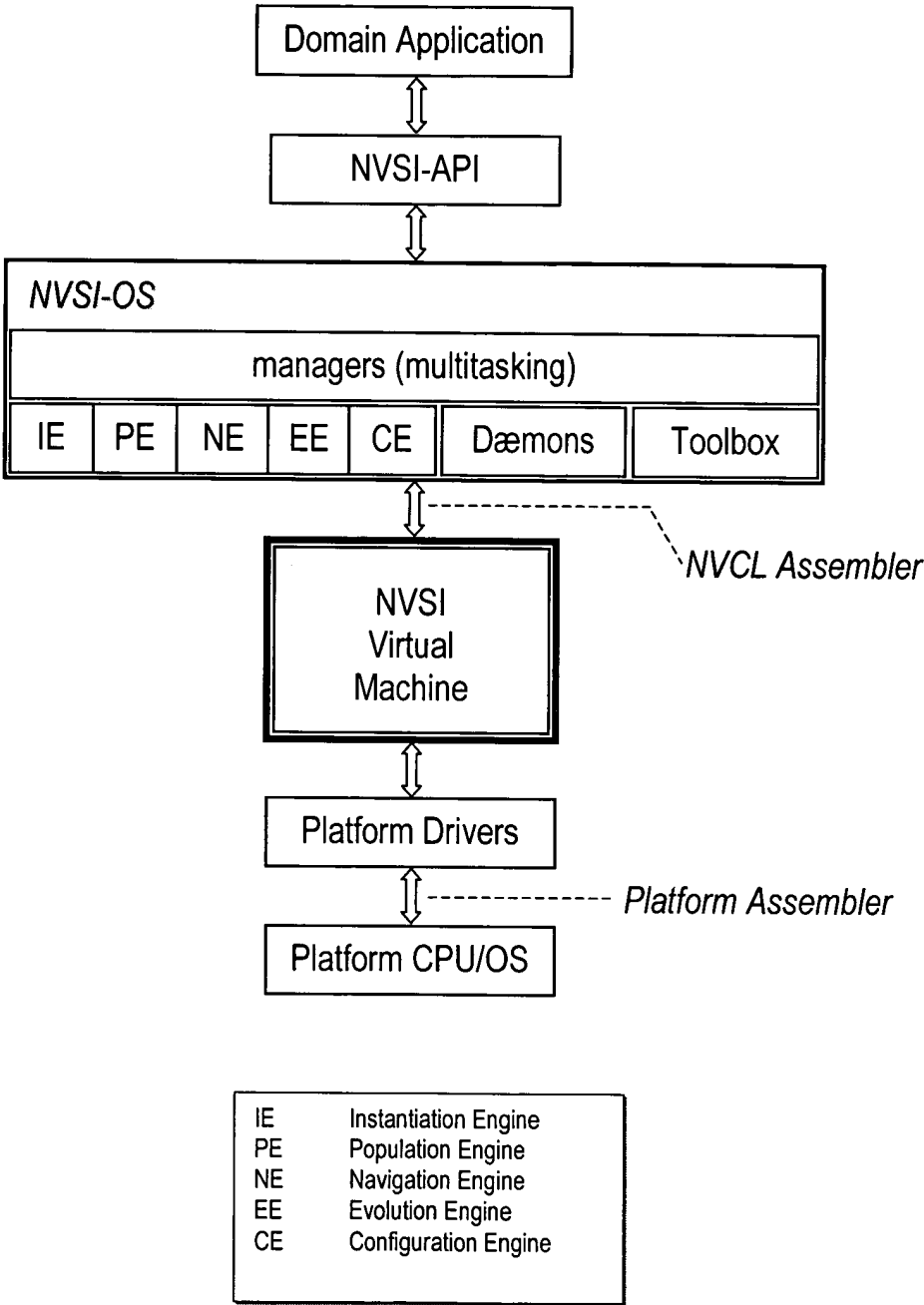


DRAWINGS

(see attached)

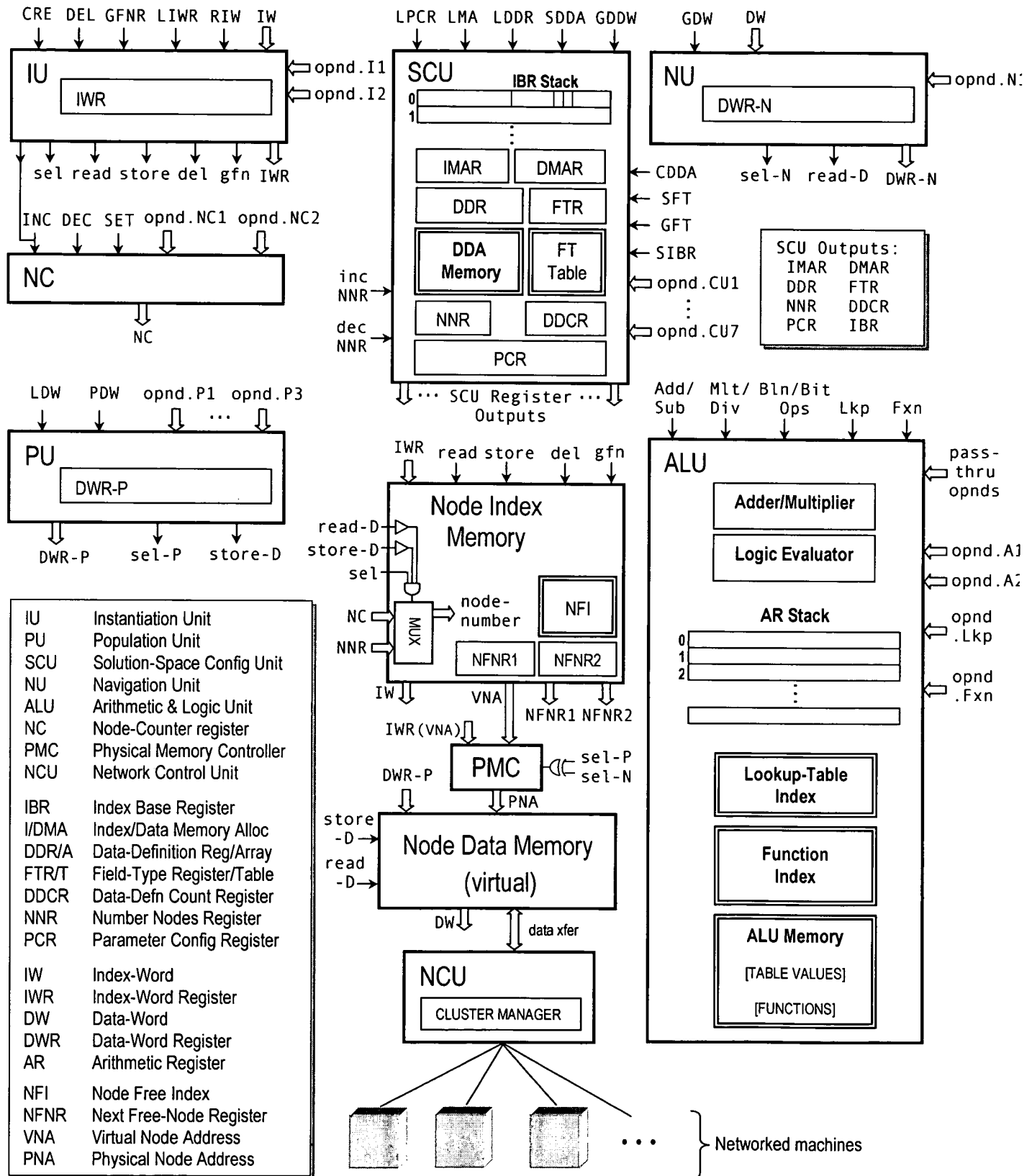
Drawing Sheet 1 / 7

FIG. 1. NVSI System Configuration Overview



Drawing Sheet 2 / 7

FIG. 2. NVSI Virtual Machine Components and Logical Interconnections



Drawing Sheet 3 / 7

FIG. 3. Pseudocode representation of the action of the Configuration Engine.

Configuration Engine:

Create & store m data definition words (DDW)

begin

for $DDnum = 1$ **to** m **do** ; m is the number of different data-word definitions
 ; in the domain solution-space (data memory).

- **create** a data definition word (DDW) in register (DDR),
 according to parameters specified by Domain Application Program (DAP)
- **store** DDW into the DD array in Configuration Unit

end do

end

end

Drawing Sheet 6 / 7

FIG. 6. Pseudocode representation of the action of the Navigation Engine.

Navigation Engine:

Find and read a node data-word

begin

get selected node-number from DAP

read IW from Index Memory at NC = node-number

read DW at corresponding VNA into DWR-N

end

Drawing Sheet 7 / 7

FIG. 7. Pseudocode representation of the action of the Evolution Engine.

Evolution Engine:

Add, Delete or Modify a node

begin

get selected node-number from DAP

get evolution *condition* (add new node, delete node, modify node) from DAP

branch on condition

- Add node:
 - **call** Instantiation procedure for NC = node-number
 - **call** Population procedure for same node,
according to parameters specified by DAP
 - **exit**
- Delete node:
 - **call** Instantiation procedure (delete mode) for NC = node-number
 - **update** NFI and release space in data memory via PMC
 - **exit**
- Modify node:
 - **call** Navigation procedure for NC = node-number
 - **modify** fields in DWR-P as specified by DAP
 - **call** Population procedure for NC = node-number
 - **exit**

end branch

end